## **Venable LLP Symposium on African Wireless Deployment Issues**

By

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Thank you for inviting me to speak this afternoon.

It is an honor for me to speak to a group that is dedicated to bringing about wireless to Africa. As a person of Africa, I was born and raised in Ethiopia, I have great hopes that wireless technologies will be one of the critical ways of advancing the continent to a better status.

My talk today does not represent the views of the Commissioner. They simply reflect mine and were developed over the past decade in my capacity here at the Commission, as a consultant working for Coopers & Lybrand (which did numerous privatization projects around the world), and as an internet executive where I took the lead in opening telecommunications market in order to promote "commercial" internet services. Most of my "lessons" come from my experience as President of PSINet's India, Middle East and Africa operations during 1999-2000 period.

Let me be clear from the outset that I am an ardent free marketer and highly in favor of competitive markets. I am also in favor of speed as a catalyst for change and believe that the worst mistake of policy makers is when they favor analysis over action.

The policies I describe below reflect all these principles.

Wireless is clearly a "leapfrog" technology. It permits the ability to easily transmit information across wide geographies with the least amount of cost and capital expenditure. It can be built out according to population densities instead of despite them.

Better information lets good things happen:

it removes distance as a barrier to communication and understanding it allows for better planning and resource allocation it permits for widespread education of the population in both academic and practical matters

Overall, better information creates a smarter communities, societies, people and countries.

With this context firmly grounded, one turns to the question of how do we get wireless technologies to take root in Africa? What needs to be done at the policy level to permit the growth of wireless technology and the possibilities it brings for African countries to leapfrog years of infrastructure developments...?

Policy Issue #1: Wireless Deployment can't take place if the underlying society doesn't have freedom of speech and other democratic ideals.

Although this issue sounds galactic in nature, it is a real problem to wireless deployment. Countries that have restrictions on speech can not afford wireless technology to be deployed. Wireless is by its very nature highly personalized service. As such it permits information flow between individuals and therefore represents threat to any government or system that wants to limit such communication. Without this very first fundamental change, wireless deployment will always be marginal.

Policy Issue #2: Wireless Market Structure Needs to Favor Multiple Entrants, Speed of Deployment, and Population Coverage

Countries planning to develop market entry strategies for wireless should do so with multiple entrants competing with each other. Credits/advantages should be given for

entrants that provide for speedy deployment of services to the largest population as soon as possible.

The license and spectrum allocation process should promote multiple entries. There is a perception that starting with monopolies with gradual deregulation is better for new market development. I disagree vehemently with the gradualist approach. [cite to Egypt as one country that started out with a couple of new entrants and its reached a penetration of 5 mm in 4 years whereas the wireline has only reached 10 mm after 60 years...only this year will the incumbent ILEC enter the fray.]

The gradualist approach only leads to scaring capital away and to depriving the country's consumers from the benefit of wireless services. For example, in the US market penetration for cellular was only up to 24 mm in 1993/1994 where it was only a duopoly. With the advent of price deregulation and the availability of new PCS spectrum that permitted new entrants, penetration rate has increased 6 fold to 150 mm subscribers and prices have fallen by more than 80% during the same period.

Policy Issue #3: Attracting Investment Capital requires liberal investment laws as well as transparent, technology neutral, and consistent regulatory process

Wireless deployments are infrastructure deployments and will require, on a relative scale, large amounts of equity and debt capital. Thus, a liberal investment code that permits for global market based returns and for "free and unfettered" repatriation of capital seems to critical to the development of most infrastructure developments.

In addition, the policy making environment needs to provide for a high degree of transparency so that investors are insured of due process. On a more practical side, license terms should be long enough, at a minimum 10 years, in order for the investors to recoup their investment. Build-out requirements and construction deadlines should be spelled out at the licensing procedure stage and should be explicit, transparent and equitable among the various service providers competing. Interim requirements should not be provided as negative inducements but as positive incentives (for example, one could get a pro-rata extension of a license term for reaching end-goals ahead of the license term).

Policy Issue #4: Wireless Equipment Choices should be left to the service provider

Along with having multiple carriers, governments that want a vibrant wireless sector should allow the service providers to make the equipment selection themselves. Alternative technology choices seem chaotic in the first instance but they do let consumer choice drive value.

Service providers will make choices that permit them to benefit from economies of scale available in this sector globally while meeting most of the needs of the consumers.

Policy Issue #5: Policy makers need to make sure that there are no bottleneck inputs into the wireless sector...they should make incumbent regulations wireless friendly

International transport and access to the public switched transport network are two key elements of the existing infrastructure that must be modified before wireless can take root. Over time, wireless should drive both elements but initially policy makers must make sure that these key inputs do not become bottlenecks in the development of the wireless services.

Policy Issue #6: Infrastructure Sharing in Wireless should be promoted

Infrastructure in terms of towers and other signal propagating devices should be encouraged to be shared among service providers. Investments by wireless carriers or service providers into constructing towers are duplicative and wasteful. In addition, multiple investments in infrastructure make it difficult to apply consistent zoning and other necessary regulations without a cumbersome review process for each individual towers. Based on our experience in the United States, it would be ideal for the government to provide financial or regulatory incentives that encourage the sharing of

such infrastructure. Avoiding duplicative investments in towers will free capital so carriers can focus on technology choices and targeted consumer applications.

Policy Issue #6: Be prepared for successful wireless deployment to bring new challenges other business sectors

As a personalized service, wireless will challenge policy makers in other areas. Wireless deployments will enable new forms of commerce and possibly create new methods of disbursing capital. Will the larger society be ready to accept such changes? Will it be appropriate for the wireless service provider to be the largest provider of credit transactions? Challenges will also come in the form of new ways of accessing the global information network. Will the broader society be comfortable with such approaches?

#### Conclusion

Clearly, I am a believer in free markets and competition. I also favor a big bang approach to creating new markets especially for wireless since its fundamental makeup permits for a departure from the traditional regulatory incrementalism that tends to reward incumbents and slows down the benefits of such great technology.

Wireless represents a real political challenge to governments since it is a highly personal service. It is this core challenge that is truly been holding back wireless development in Africa. Until such challenge is effectively dealt with, wireless deployment in most African countries will lag that of other more developed nations.